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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,214.	10/13/2005	Masanao Kamei	4710-0122PUS1	8978

2292 7590 01/29/2008  
BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER
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SOROUGH, ALI

ART UNIT	PAPER NUMBER
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1616

NOTIFICATION DATE	DELIVERY MODE
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01/29/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	Application No. 10/553,214	Applicant(s) KAMEI ET AL.	
	Examiner Ali Soroush	Art Unit 1616	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 November 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5-8 and 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-8 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Acknowledgement of Receipt***

Applicant's response filed on 11/14/2007 to the Office Action mailed on 08/14/2007 is acknowledged.

### ***Status of the Claims***

Claims 4 and 9-28 have been cancelled, 1-3 and 5-8 have been amended, and claim 29 has been newly added. Therefore, claims 1-3, 5-8 and 29 are currently pending examination for patentability.

### ***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The rejection of claims 1-4 and 9, 11-24 under 35 U.S.C. 102(b) as being anticipated by Tetsuo et al. (European Patent Application EP 1065234 A2, Published 03/01/2001) **is withdrawn** in light of the amendment filed with aforementioned response.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Applicant Claims
2. Determining the scope and contents of the prior art.
3. Ascertaining the differences between the prior art and the claims at issue; and resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. The rejection of claims 5, 27, and 28 under 35 U.S.C. 103(a) as being unpatentable over Tetsuo et al. (European Patent Application EP 1065234 A2, Published 03/01/2001) **is withdrawn** in light of the amendment filed with aforementioned response.

2. The rejection of Claims 7 and 8 under 35 U.S.C. 103(a) as being unpatentable over Tetsuo et al. (European Patent Application EP 1065234 A2, Published 03/01/2001) further in view of Nishizawa et al. (US Patent Application 2006/0123564 A1, Published 06/15/2006, Filed 11/27/2003) **is withdrawn** in light of the amendment filed with aforementioned response.

3. The rejection of claims 6 under 35 U.S.C. 103(a) as being unpatentable over Tetsuo et al. (European Patent Application EP 1065234 A2, Published 03/01/2001) further in view of Nishizawa et al. (US Patent Application 2006/0123564 A1, Published 06/15/2006, Filed 11/27/2003) further in view of Nakazatoa et al. (US Patent 6290942 B1, Published 09/18/2001) **is withdrawn** in light of the amendment filed with aforementioned response.

***New Grounds of Rejection***

4. Claims 1-3, 5-8 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tetsuo et al. (European Patent Application EP 1065234 A2,

Published 03/01/2001) in view of Nishizawa et al. (US Patent Application  
2006/0123564, Published 07/16/2006, Filed 11/27/2003).

***Applicant Claims***

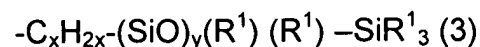
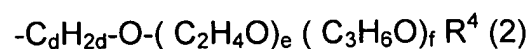
Applicant claims a composition comprising an organopolysiloxane and an amino-modified silicones. Applicant further claims a method of conditioning hair by applying the composition to the hair.

***Determination of the Scope and Content of the Prior Art (MPEP §2141.01)***

Tetsuo et al. teaches, "Cosmetic material containing powders treated with silicones, with silicones being represented by the following formula (1):



wherein the  $R^1$  groups, which are the same or different, each represent an organic group selected from the class consisting of alkyl groups containing 1 to 30 carbon atoms, aryl groups, aralkyl groups, fluorinated alkyl groups and organic groups represented by the following formula (2);  $R^2$  groups each represent a reactive substituent selected from the class consisting of a hydrogen atom, hydroxyl group and alkoxy groups containing 1 to 6 carbons atoms, which is attached to a silicon atom in the siloxane chain directly or via a linkage group comprising at least one carbon, oxygen or silicon atom;  $R^3$  groups each represent a silicone compound residue represented by the following formula (3); a is a number of from 1.0 to 2.5; b is a number of from 0.001 to 1.5; and c is a number of from 0.001 to 1.5



wherein  $R^4$  is a hydrocarbon group containing 4 to 30 carbon atoms or an organic group represented by  $R^5-(CO)-$ ;  $R^5$  is a hydrocarbon group containing 1 to 30 carbon atoms; d is an integer of from 0 to 15, e is an integer of from 0 to 50, and f is an integer of from 0 to 50; and x is an integer of from 1 to 5, and y is an integer of from 0 to 500." (See abstract). The cosmetic material can come in any of the forms including liquid, emulsion, solid, paste, gel and spray forms. (See page 9, Lines 9-10). "When the present silicone compounds represented by formula (1) are used as a powder surface-treating agent, the weight average molecular weight suitable therefor, though it has no particular limits, is from 300 to 100,000." (See page 4, Lines 30-31). In a specific example a compound organosiloxane is formed for use in a cosmetic composition that has an  $R''' = C_3H_6O(C_3H_6O)_3C_{18}H_{35}$  (see example 4),  $R'' = C_2H_4(CH_3)_2SiO(SiO)_7(CH_3)(CH_3)Si(CH_3)_3$ ,  $R^* = C_2H_4Si(OEt)_3$  (See example 1). (See page 10, paragraph 0077 and page 11, formula 12). "A surface treated powder, having the surface treated by using silicones according" to the description in the abstract. (See page 23, claim 2). "A cosmetic material in which powders are mixed, at least one of said powders being a surface-treated powder according to any of claims 2 to 7. (See page 23, claim 8). "A cosmetic according to claim 8, further containing unctuous agents as a constituent." (See page 23, claim 9). "A cosmetic material according to claim 9, wherein at least a part of the unctuous agents are fats and oils in a liquid state at room temperature." (See page 23, claim 10). "A cosmetic according to claims 9, 10, 11, wherein at least one of the unctuous agents is an oil having fluorine-containing groups or amino groups." (See page 23, claim 12). Additional unctuous agents that can be used in the cosmetic

material includes cyclosiloxane solutions of silicone rubber. (See page 6, paragraph 39).

"A cosmetic material according to any of claims 8 to 17, further containing water as a constituent." (See page 23, claim 18). "A cosmetic material according to any of claims 8 to 18, further containing as a constituent a compound having an alcoholic hydroxyl group in its molecular structure." (See page 23 and 24, claim 19). "A cosmetic material according to claim 19, wherein the compound having an alcoholic hydroxyl group in its molecular structure is a water-soluble polymer." (See page 24, claim 21). A cosmetic material according to any of claims 8 to 21, further containing cross-linked organopolysiloxanes as a constituent." (See page 24, claim 22). "A cosmetic material according to claim 22, wherein the cross-linked organopolysiloxanes are cross-linked organopolysiloxanes which cause swelling when they contain a silicone having low viscosities of from 0.65 to 10.0 mm<sup>2</sup>/sec at 25°C in a quantity larger than their self weight." (See page 24, claim 23). "A cosmetic material according to claims 22 or 23, wherein the cross-linked organosiloxanes having cross-linked structure formed by the reaction between the hydrogen atoms bonded directly to silicon atoms and a cross-linking agent having at least two vinylic reactive moieties per molecule." (See page 24, claim 24). "A cosmetic material according to any of claims 8 to 25, further containing silicone resin as a constituent." (See page 24, claim 26). "A cosmetic according to claim 26, wherein the silicone resin is a silicone compound having a network structure." (See page 24, claim 29). "A cosmetic material according claim 29, wherein silicone compound having a network structure is netted silicone compound containing at least one moiety selected from the group consisting of pyrrolidone, long-chain alkyl,

polyoxyalkylene, fluoroalkyl and amino moieties." (See page 24, claim 30). "A cosmetic according to claim 26, wherein the silicone resin is an acrylsilicone resin." (See page 24, claim 27). "A cosmetic according to claim 27, wherein the acrylsilicone resin is an acrylsilicone containing at least one moiety selected from the group consisting of pyrrolidone, long-chain alkyl, polyoxyalkylene, fluoroalkyl and amino moieties." (See page 24, claims 28). "A cosmetic material according to any of claims 22 to 24, wherein the cross-linked organopolysiloxanes are organopolysiloxanes having their cross-links at least one kind of moiety selected from the family consisting of polyoxyalkylene, alkyl, alkenyl, aryl and fluoroalkyl moieties." (See page 24, claim 25). "A cosmetic material according to claims 8 to 12, further containing a surfactant constituent." (See page 23, claim 13). "A cosmetic according to claim 13, wherein the surfactant is modified silicone having polyoxyalkylene chains." (See page 23, claim 14). A cosmetic material according to claims 8 to 15, further containing another powder, a coloring material or a mixture thereof." (See page 23, claim 16). "A cosmetic material according to claim 16, wherein at least a part of the powder, the coloring material or the mixture thereof is a silicone resin powder, a powder having a silicone elastomer as its skeleton, an organic powder containing constitutional repeating units represented by  $-\text{[O-Si]}_n-$  or a mixture of two or more thereof." (See page 23, claim 17). In example 12 a liquid emulsion composition is described comprising dimethylpolysiloxane, methylphenylpolysiloxane, organopolysiloxane modified with polyoxyalkylene and alkyl groups, purified water, etc. (See page 17, paragraph 0117). In example 16 a cream composition is described comprising decamethylcyclopentasiloxane (cyclic siloxane), dimethylpolysiloxane,



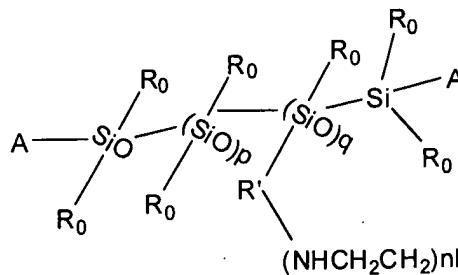
polyether-modified silicone, purified water, etc. (See page 20, paragraph 0129). "The term 'cosmetic material' as used herein are intended to include skin care ... and hairdressing products, such as shampoo, rinse and treatment." (See page 9, Lines 6-9). It is the examiner position that water is a component that is "suitable for application to hair" and therefore meets the limitation of "at least one additional ingredient suitable for application to hair".

***Ascertainment of the Difference Between Scope the Prior Art and the Claims  
(MPEP §2141.012)***

Tetsuo does not exemplify hair treatment applications. Tetsuo also teaches that such compositions can in addition to having use as skin cosmetics can also be used in hairdressing applications such as shampoo.

Tetsuo lacks a teaching of a method wherein the organopolysiloxane hair treatment composition is applied after a composition comprising an amino-modified silicone. The teaching of Nishizawa et al. cures this deficiency.

Nishizawa et al. teaches a composition containing amino-modified silicone, highly polymerized silicone, a cationic polymer, and an oxidizing agent. (See abstract). Amino-



modified silicones represented by

represents a hydroxyl group, a hydrogen atom or R, R represents a substituted or unsubstituted monovalent hydrocarbon group having from 1 to 20 carbon atoms, A

represents R, a group  $-R'-(NHCH_2CH_2)_nNH_2$ , a group OR or hydroxyl group, R' represents a divalent hydrocarbon group from 1 to 8 carbon atoms, n stands for 0 to 3, and p and q are numbers, the sum of which is, in average, 10 or greater but less than 1000, preferably 30 or greater but less than 1000, more preferably 40 or greater but less than 800. (See paragraph 0009). "The hair bleaching or dyeing with the hair bleach or dye composition of the present invention may be performed, for example, by ... applying the mixture to the hair ... allowing it to stand for 1 to 60 minutes ... for the composition to act on the hair, washing the hair and then drying hair. In this case, removal of the hair bleach or dye composition with water by light wash, shampooing of the hair with a shampoo containing an anionic surfactant and subsequent washing with water to allow the cationic polymer to be moderately washed away and the silicone to moderately remain on the hair, which ultimately allow good conditioning effects to appear." (See paragraph 0047).

***Finding of Prima Facie Obviousness Rational and Motivation  
(MPEP §2142-2143)***

It would have also been obvious to one of ordinary skill in the art at the time of the instant invention to use the composition taught by Tetsuo et al. in hairdressing applications such as shampoo. One would have been motivated to do so because if one wanted a composition to be applied to the hair which has excellent storage stability in an emulsified condition (See page 2, paragraph 0009) one would have used the composition taught by Tetsuo et al. It would have been obvious to one of ordinary skill in the art to combine the teachings of Tetsuo with Nishizawa et al. One would have been

motivated to do so because Nishizawa et al. teaches that after the application of the bleaching and dyeing composition the hair should be washed with a shampoo. For the foregoing reasons the instant invention would have been obvious to one of ordinary skill in the art at the time of the instant invention.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Soroush whose telephone number is (571) 272-9925. The examiner can normally be reached on Monday through Thursday 8:30am to 5:00pm E.S.T.

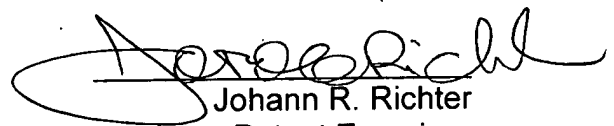
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ali Soroush  
Patent Examiner  
Art Unit: 1616

  
Johann R. Richter  
Supervisory Patent Examiner  
Technology Center 1600